

In the Specification:

At page 2, please amend paragraph [0012] as follows:

Figure 5 is a ~~is-a~~ graph of magnetization as measured by vibrating sample magnetometer (VSM) versus magnetic field strength;

At page 4, please amend paragraph [0019] as follows:

In the method and material as disclosed herein, the magnetorheological particles are preferably an iron powder. The iron powder may be any form of powdered iron, particularly carbonyl iron, reduced carbonyl iron, crushed iron, milled iron, melt-sprayed iron, low carbon steel, silicon steel, potato iron, iron alloys, or mixtures of any of the previously recited materials. In the method and material disclosed herein, the preferred particle materials are carbonyl iron and reduced carbonyl iron. Suitable carbonyl iron is derived from the thermal decomposition of iron pentacarbonyl ( $\text{Fe}(\text{CO})_5$ ). Carbonyl iron materials typically contain greater than 97% iron with carbon content less than about 1%, oxygen content less than 0.5% and nitrogen content less than 1%.

Beginning on page 7, please amend paragraph [0027] as follows:

In the method as disclosed herein, the particles are exposed to a nitrogen-rich environment for an interval sufficient to impart a nitrogen-rich surface on the particles so exposed. As used herein, the term “nitrogen-rich environment” is taken to mean an environment in which nitrogen or a nitrogen-containing compound is present, preferably in gaseous form, in sufficient quantity or concentration to provide nitrogen for diffusion into the magnetorheological particles. The nitrogen-rich environment may be composed of nitrogen-donating materials such as nitrogen gas, ammonia, and the like. It is also contemplated that the nitrogen-rich environment may include other nonoxidative gases that do not impede the diffusion or integration of nitrogen into the magnetorheological particles. In a non-limitative example embodiment, the nitrogen-rich environment has a major portion of nitrogen and a minor portion of a gaseous material inert to interaction

with the ferromagnetic particles. In ~~the~~ another embodiment of the method as disclosed, a nitrogen-rich environment composed solely of nitrogen gas is preferred.

At page 10, please amend paragraph [0034] as follows:

Preferably, the small particles are at least one micron in diameter so that they are suspended and function as magnetorheological particles. The practical upper limit on particle size is about 100 microns since particles of greater size usually are not spherical in configuration but tend to be agglomerations of other shapes. However, for the practice of the embodiments disclosed herein, the mean diameter or most common size of the large particle group preferably is 5 to 10 times the mean diameter or most common particle size in the small particle group. The weight ratio of the two groups may be within 0.1 to 0.9. The composition of the large and small particle groups may be the same or different. Carbonyl iron particles are preferred. Such materials typically have a spherical configuration and work well for both the small and large particle groups.

Please insert the following new paragraph between paragraphs [0035] and [0036]:

In an embodiment, the MR particles exposed to the nitrogen-rich environment are small ferromagnetic particles having an average particle size distribution ranging between about 1 micron and about 10 microns. It is to be understood that the method may include integrating these smaller particles with larger ferromagnetic particles prior to exposing the smaller ferromagnetic particles to the nitrogen-rich environment. In an alternate embodiment of the method, the integration of the smaller particles with the larger particles occurs after exposure to the nitrogen-rich environment. In a further embodiment, the small particles are admixed with ferromagnetic particles having an average size distribution ranging between about 5 microns and about 30 microns. In this embodiment, the admixture occurs after the small particles have been exposed to the nitrogen-rich environment. In still a further embodiment, the small particles are admixed with ferromagnetic particles having an average particle size distribution greater than

about 10 microns. It is to be understood that this admixture occurs after the small particles have been exposed to the nitrogen-rich environment.